

Message

**From:** Arnold, David [arnold.david@epa.gov]  
**Sent:** 2/4/2019 6:28:46 PM  
**To:** Riggs, James [riggs.james@epa.gov]; Isin, Amelie [Isin.Amelie@epa.gov]; Fernandez, Cristina [Fernandez.Cristina@epa.gov]  
**CC:** Hagedorn, James [hagedorn.james@epa.gov]  
**Subject:** RE: Christmas Eve Fire at USS Clairton Works

Thanks.

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**From:** Riggs, James  
**Sent:** Monday, February 04, 2019 1:16 PM  
**To:** Arnold, David <arnold.david@epa.gov>; Isin, Amelie <Isin.Amelie@epa.gov>; Fernandez, Cristina <Fernandez.Cristina@epa.gov>  
**Cc:** hagedorn, james <hagedorn.james@epa.gov>  
**Subject:** RE: Christmas Eve Fire at USS Clairton Works

Battery	Normal Coking Time (hrs)	Previously Reported Coking Times	Current Coking Times
1	22	22	23 (Increased on 1/14)
2	22	22	23 (Increased on 1/14)
3	22	22	23 (Increased on 1/14)
13	18	21.5	22
14	18	21.5	22
15	18	21.5	22
19	18	22.5	24 (Increased on 1/25)
20	18	22.5	24 (Increased on 1/25)
B	18	20	20
C	18	20	21 (Increased on 1/17)

This information was included in the 1/25 mitigation report from USS to ACHD. There haven't been discussions (that I'm aware of) about how effective the current coking times will be at reducing the amount of coke oven gas generated or if they should be coking longer.

**James Riggs**  
Physical Scientist  
Office of Air Enforcement and Compliance Assistance  
Air Protection Division  
EPA Region III  
215-814-2238

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**From:** Arnold, David  
**Sent:** Monday, February 04, 2019 12:20 PM  
**To:** Isin, Amelie <Isin.Amelie@epa.gov>; Fernandez, Cristina <Fernandez.Cristina@epa.gov>  
**Cc:** Riggs, James <riggs.james@epa.gov>; hagedorn, james <hagedorn.james@epa.gov>  
**Subject:** RE: Christmas Eve Fire at USS Clairton Works

Do you know by how much they are increasing the coking time?

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**From:** Isin, Amelie  
**Sent:** Monday, February 04, 2019 12:04 PM

**To:** Fernandez, Cristina <Fernandez.Cristina@epa.gov>

**Cc:** Riggs, James <riggs.james@epa.gov>; hagedorn, james <hagedorn.james@epa.gov>; Arnold, David <arnold.david@epa.gov>

**Subject:** Christmas Eve Fire at USS Clairton Works

Hi Cristina,

Here is an update from enforcement on the Clairton fire in case you want to discuss during your call with ACHD this afternoon:

- Jim Hagedorn and James Riggs had a call with Dean Deluca of ACHD last week to discuss the 12/24/2018 fire at USS Clairton Works. *Bottom line: This facility requires enforcement followup, but ACHD has not requested EPA assistance.*
- Mechanical failure in one of the compressors caused a fire in the desulfurization process that led to the shutdown of the No. 2 and No. 5 control rooms. The desulfurization process removes sulfur from the coke oven gas stream that they then make into a finished product.
- This desulfurization equipment was damaged severely and will need to be replaced. As well as significant structural damage, repairs are estimated to take around four months.
- During this time, Clairton Works will not be able to run their desulfurization equipment to clean the coke oven gas stream. To compensate for this, Clairton Works is increasing the coking time in the batteries and reducing production. This will result in less coke oven gas being generated.
- Since coke oven gas from Clairton is used as a primary fuel in operations at other USS plants in the Mon Valley (Edgar Thomson and Irvine Works), USS is increasing their use of natural gas and sending any excess coke oven gas to a series of flares located above the inversion layer at Irvine Works. *This is a concern because the flares at Irvine Works may not have been designed to handle the amount of gas going to them and may still be emitting sulfur into the atmosphere.*
- Additionally, while Clairton Works has slowed production, they are still in operation and still using some coke oven gas. *ACHD (and the Jims) believe that, without the desulfurization process, it is likely that they are blowing their sulfur limits each day that they continue to operate.* It is worth mentioning that they are not required to operate the desulfurization system since it is considered process equipment, not control equipment (i.e. no permit requirement).
- ACHD will most likely take an enforcement action regarding the blown limits. A nearby air monitor showed exceedances of the SO<sub>2</sub> NAAQS on the following dates (from USS website on the issue):

12/26/2018 – 10 a.m. – 79 ppb  
12/26/2018 – 11 a.m. – 80 ppb  
12/28/2018 – 10 a.m. – 145 ppb  
1/2/2019 – 9 p.m. – 81 ppb  
1/3/2019 – 11 p.m. – 85 ppb  
1/8/2019 – 12 midnight – 80 ppb  
1/8/2019 – 4 a.m. – 76 ppb

There have been no reported exceedances of the 1-Hr SO<sub>2</sub> NAAQS at the Liberty Borough monitor since 4 a.m. on Jan. 8.

- Note that there is a large push from citizens in the area for Clairton Works to “hot idle” this facility, but it is unlikely that this will occur. Hot Idle can damage the long term health of a coke oven battery since dramatic temperature changes in an oven can degrade it and lead to more problems in the future. In addition, besides the potentially blown sulfur limits, the coking equipment at the facility was not harmed by the fire. USS does not feel that hot idling their batteries will speed up the repairs and would only serve to cost the company more money as they would not be able to produce coke.
- USS has supplied ACHD with a mitigation plan that details the process changes at the facility and submits weekly updates to the county on the progress of the repairs. In addition, ACHD has daily calls with the company and sends two employees to the facility twice a week to observe the repairs and status of the facility. There is a public

meeting on the 7<sup>th</sup> (we think) that will be attended by state and local representatives, USS, citizen groups, and private citizens.

- There are also substantial public complaints about how ACHD handled notifying the public of the incident. ACHD staff were not available to immediately publicize the incident until almost a week after it occurred because it was over the holidays.

Here is the latest mitigation report from USS to ACHD regarding this incident:

[https://monvalley.uss.com/uss/wcm/connect/monvalley.uss.com-762/69141346-d7da-439e-afa3-9fd47df94585/01-25-19+USS+Mitigation+Plan.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE.Z18\\_4MBFVL4RS9HH70Q2ACD-TG51443-69141346-d7da-439e-afa3-9fd47df94585-my7DHRL](https://monvalley.uss.com/uss/wcm/connect/monvalley.uss.com-762/69141346-d7da-439e-afa3-9fd47df94585/01-25-19+USS+Mitigation+Plan.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE.Z18_4MBFVL4RS9HH70Q2ACD-TG51443-69141346-d7da-439e-afa3-9fd47df94585-my7DHRL)

Here is a link to USS' website with FAQ's on the issue:

[https://monvalley.uss.com/uss/portal/monvalley/monvalleyfaqs/lut/p/z1/04\\_Sj9CPykssy0xPLMnMz0vMAfljo8ziLQ0MnB2dDB0NDFx9HQ0Cgw0NLd0Cwgy9PQ3lw\\_EqMDLQjyJGvwEO4EiE\\_ii8SkAuACvAY0VBbmiEQaajlgDdlM18/dz/d5/L2dBISEvZ0FBIS9nQSEh/](https://monvalley.uss.com/uss/portal/monvalley/monvalleyfaqs/lut/p/z1/04_Sj9CPykssy0xPLMnMz0vMAfljo8ziLQ0MnB2dDB0NDFx9HQ0Cgw0NLd0Cwgy9PQ3lw_EqMDLQjyJGvwEO4EiE_ii8SkAuACvAY0VBbmiEQaajlgDdlM18/dz/d5/L2dBISEvZ0FBIS9nQSEh/)

Please let me or James Riggs know if you have any questions.

Thanks,

Amelie